

Guidelines on Croup

What is Croup?

Croup is a common viral upper respiratory infection (viral bronchitis). Croup is due to swelling around the vocal cords, which results in the characteristic “barking” cough, and difficulty breathing. This condition is often seen in young children and infants, typically between 3 months and 5 years. Croup is seen more often in the Northern hemisphere, usually between the months of October through March. However, it can occur at anytime during the year.

Cause(s) can include

- Viral: The most common viral cause is the parainfluenza virus (75% of the time) but other viruses that can cause croup include RSV, measles, adenovirus and influenza
- Bacterial infections
- Allergies; inhaled irritants can cause a condition known as Spasmodic Croup, which is similar to infectious croup except it does not include symptoms of illness such as fever

What are the Symptoms?

- Barking, seal-like cough which tends to be worse at night-usually between 10pm and 6am
- Possible mild cold symptoms for several days prior to the development of the cough
- Labored breathing
- Stridor: a high pitched squeaking noise when breathing in
- Excessive drooling or extreme difficulty swallowing saliva
- Fever (low grade-103)
- Runny nose-usually clear
- Decreased appetite , headache and irritability

Serious Complications

- Persistent difficulty breathing
- Bluish color of the skin
- Dehydration
- Epiglottitis (the epiglottis which is the valve that guards the airway becomes swollen and begins to obstruct the airway)
- Collapsed lung
- Retraction (tugging in-between the ribs when breathing in)

How is Croup Diagnosed?

- Description of symptoms
- Physical exam
- Neck x-ray, which detects a narrowing of the top of the airway (Steeple’s Sign)

How does Croup Spread?

Croup is respiratory illness, which can be spread through air borne droplets expelled during coughing or sneezing. These droplets may be inhaled or transferred to the oral or nasal passages from an individual’s hand, which has come in contact with the virus.

How to Avoid Getting Croup?

- Frequent hand washing for all children and staff
- Respiratory etiquette: Cover mouth when coughing/sneezing, dispose of tissues correctly and wash hands after coughing or sneezing
- Appropriate disinfecting/cleaning procedures
- When possible avoid contact with those who have the respiratory illness

How is Croup Treated?

- Cool and moist air (i.e. cool mist vaporizer)
- During an episode of a croup cough- warm steam for 10-15 minutes may ease the symptoms or cold air (less than 40 degrees) can help shrink the inflammation in the airway, stopping the croup attack in minutes.
- Acetaminophen for comfort/fever (avoid cough medicines unless recommended by the child's medical provider. Most cough syrups do not help the larynx or trachea area where the infection/swelling is located.)
- Steroids
- Medicated aerosol treatments

Length of the Contagious Stage

As with many viruses, the illness is contagious before the symptoms appear. Viral croup lasts between 3-7 days but the cough may linger for 1-2 weeks. The first two days are when the symptoms are most severe.

Exclusion from the Center

Exclusion is not indicated; however, some children may experience symptoms, which will interfere with their ability to participate in the activities of the center such as:

- Extreme fatigue
- Inability to consume sufficient fluids/nutrients
- Fever
- Excessive coughing that may precipitate repetitive vomiting episodes or extensive fatigue

Resources:

<http://www.medicines.com>

<http://kidshealth.org>